

**ADDENDUM TO THE  
PANTAGES BAYS RESIDENTIAL DEVELOPMENT PROJECT  
ENVIRONMENTAL IMPACT REPORT  
(State Clearinghouse #2007-052130)**

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**County File Numbers:  
DP14-3017**

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## **1 Purpose**

The purpose of this addendum is to evaluate the environmental effects of the proposed changes to the previously approved Pantages Bays Residential Development Project (the project). An Environmental Impact Report (EIR) (State Clearinghouse #2007052130) for the project was certified by the County in 2013.<sup>1</sup> This addendum and attached supporting documents have been prepared to determine whether and to what extent the previously approved EIR remains sufficient to address the potential impacts of the project, or whether a supplemental or subsequent EIR is required under the California Environmental Quality Act (CEQA).

## **2 The Previously Approved Project**

The previously approved project consisted of plans to construct 292 detached single-family residential housing units that would form part of the Discovery Bay community. The project included a Sheriff Marine Patrol Substation, associated roadways, pedestrian facilities, and utilities infrastructure. Of the 292 units, 116 waterfront lots would be developed with individual or shared docks and deep water access, and 176 interior residential lots. In addition to residential development, the project would widen the portion of Kellogg Creek immediately east of the project site. The proposed widening of Kellogg Creek is cosponsored by Reclamation District No. (RD) 800 to reduce water velocities and improve public safety in that section of Kellogg Creek. The widening would also reduce bank erosion and sedimentation, and would limit the need for dredging. The project would preserve approximately 16 acres of existing emergent marsh in the northern portion of the main project property and 1.7 acres on the island portion of the property. Additionally, the project also includes the creation of new seasonal wetlands and enhanced creek bank aquatic habitat. The plans for the project required approval of a General Plan Amendment, Rezoning, Subdivision/Tentative Map Approval, Final Development Plan and tree removal. The project also required approval from the Contra Costa Local Agency Formation Commission (LAFCO) for annexation to the RD 800 and to the Discovery Bay Community Services District sphere of influence and corresponding service boundary.

The project site is located in unincorporated eastern Contra Costa County approximately 16 miles west of Stockton; approximately 4.5 southeast of Brentwood; and 19 miles north of Livermore. The approximately 171-acre project site is undeveloped except for a few dilapidated residential and agricultural buildings. The site is located west of the original Discovery Bay subdivisions, at the eastern terminus of Point of Timber Road (**Figure 1**).

## **3 Project Changes Addressed in this Addendum**

The project applicant has filed an application with the Contra Costa County Conservation and Development Department (CDD) for modification to its approved final development plan and vesting tentative map for the project.

The proposed modifications are mostly associated with the construction technique used to build the shoring walls for the development and the configuration of the site plan. The following modifications are proposed:

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<sup>1</sup> County file numbers: GP99-0008, RZ04-3146, SD06-9010, DP04-3062

- replacement of cement deep soil mixing shoring wall construction with the sheet pile shoring wall construction method
- likely maximum bay depth of 33 feet, and a minimum bay depth of –11 feet for boat keel clearance
- the following new cut and fill amounts: 1,305,461 cubic yards of excavated soils and 1,344,237 cubic yards of fill
  - for conservative purposes only, the project modifications include import of up to 90,007 cubic yards of fill per year
    - haul trucks would access the project site using the following proposed route: Trucks would use Highway 4, approximately 1.5 miles away from the project site, then proceed onto Bixler Road, and then turn right onto Point of Timber Road to enter the project site
- reconfiguration of streets, bays, and coves of the site plan
  - increase in the amount of impervious surface, from 17.4 acres to 18.7 acres; an approximately 7.4 percent increase
- reduction of waterfront lots to 105 (from 116); increase of non-waterfront lots to 187 (from 176)

A description of these changes is provided below.

### **Construction Method**

The construction modification would replace the cement deep soil mixing shoring wall construction method with the sheet pile shoring wall construction method. The previous construction method involved drilling linear holes at the rear of the waterfront lots and backfilling it with a mix of cement, soil, and reinforcing steel I-beams. Upon further evaluation of this method, it was determined unfeasible due to complications associated with the design of the shoring wall. Additionally, the shoring wall's life-span at this height was not long enough for the proposed use. As a result, this construction method is no longer preferred.

An alternative construction approach is the sheet pile shoring wall method. This method will improve structural stability and longevity of the shoring wall. Sheet piles provide support through its stiffness, particularly in clay-like soils, and are vertically driven to provide a continuous, semi-impermeable wall.<sup>2</sup> For these reasons, the applicant is proposing the sheet pile shoring wall construction method for the project.

According to the American Pile Driving Equipment (APE)<sup>3</sup>, a variable moment hammer is a vibratory driver/extractor that has no amplitude, or moment (energy), when the hammer is started and stopped. Accordingly, this equipment type minimizes radial vibration in the surrounding native soil and maximizes the drivability of the pile with limited impact on nearby structures. Such equipment reduces the amount of friction and resistance between the pile and the soil, making penetration easier in some soil strata. The variable moment hammer enables a

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<sup>2</sup> Each section of wall is approximately 6 feet wide, and will be installed to form a continuous wall that varies between approximately -41.9 to -47.6 feet below the elevation of the finished ground, and the finished ground has a below water slope of 4:1 off the sheet pile wall into the bay. The sheet pile method involves a variable moment hammer that would press the sheet piles into place.

<sup>3</sup> American Piledriving Equipment (APE), 2014. What is a Variable Moment Driver/Extractor and How Does it Work. Accessed 10/24/14 from <http://www.apevibro.com/ver2/products/vibro/variable.asp>



pile to be driven into the ground with little added load and generates vibratory oscillations suitable for the particular soil-type. This pile driving technique was developed to reduce noise effects associated with other forms of classic pile driving.

### Grading

The cut and fill amounts with the reconfigured site plan varies from cut and fill amounts analyzed in the 2013 EIR, as shown in **Table 1**. Fill material would be balanced on-site; however there is a potential to import up to 90,007 cubic yards per year of the fill material. If needed, developers would excavate more soil to maintain the balance. However, as included in the Contra Costa County Conditions of Approval (number 79), if the final grading plan and the actual grading is not balanced, then the applicant shall prepare an off-site dirt hauling plan that will include the pavement analysis and any necessary road repair as required in Public Works Condition 102 for submittal to the County for its review and approval.

**Table 1 Grading Balance**

	2013 EIR	2014 Revised Project
<b>Cut</b>	1,130,000 cubic yards	1,305,461 cubic yards
<b>Fill</b>	1,250,000 cubic yards	1,344,237 cubic yards

Source: dk Consulting, 2014

Note: Although the applicant intends to balance cut and fill as much as possible, there is a potential of up to import fill materials to the site

The modification is conducive to the phased infrastructure improvements and site grading would still be completed over several seasons. Pad and street elevations would still be above the 100-year flood elevation. Relocation of existing utilities in a joint trench serving older Discovery Bay and the project site would be avoided.

### Proposed Site Plan

The proposed project modifications include a reconfiguration of the previously-approved site plan (see **Figure 2**). As shown on the figure, the previously-approved plan included four bays: the North Cove, North Bay, South Bay, and South Cove. The North Bay is no longer included in the proposed project modifications; instead, single family residential units would be developed in its place. Additionally, proposed project modifications would alter the shape of the South Bay and South Cove in relation to proposed residences. As a result, most residences would be located on the north side of Point of Timber Road instead of the south side. **Figure 3** shows a layout of proposed land uses. Most single family, low-residential units would be located around the South Bay and South Cove; most single family, high-density residential units would be located around the North Cove. While the reconfiguration of the site plan would reduce the number of waterfront homes and increase the number of non-waterfront homes, the total amount of residential units will remain the same at 292 residential units (**Table 2**). The Point of Timber Road would remain the main entry point into the Pantages Bays Development, but the roadway would be extended to access proposed residences along C Street, C Court, E Street, D Street, and D Court.

**Table 3** summarizes proposed land use acreages from the 2013 EIR and the proposed project modifications. Since the proposed modifications no longer include plans for the North Bay, the amount of acres of “water” is reduced. An increased amount of landscaped open space/passive

recreational is proposed adjacent to the gated vehicular entry point at Point of Timber Road and B Street. Accordingly, the reconfigured layout of the South Bay would open public views for users of the open space/recreational area near the entry point. An emergency vehicle access through the proposed open space and emergent marsh is no longer necessary given the revised street alignments. While the acreage of land uses would be slightly repurposed, the total net acreage of land uses would not change.

**Table 2 Net Change in Residence Type**

Land Use Designation	2013 EIR	2014 Revised Project
Number of Waterfront Homes	116	105
Number of Non-Waterfront Home	176	187
<b>Total Number of Homes</b>	<b>292</b>	<b>292</b>

Source: dk Consulting, 2014

**Table 3 Net Acreage by Land Use Type**

Land Use Designation	2013 EIR Acreage (acres)	2014 Revised Project Acreage (acres)	Net Change (acres)
Single Family Medium	46.3	42.3	-4.0
Single Family High	34.0	45.5	+11.5
Water	46.8	37.6*	-9.2*
Public/Semi-Public	0.9	2.6	+1.7
Open Space	43.2	43.2	0
<b>Total Acreage</b>	<b>171.2</b>	<b>171.2</b>	<b>0</b>

Note: \*9.7 acres consist of riprap slope area, which is located at the back of the waterfront lots.

Source: dk Consulting, 2014

### Modification Approval

The Contra Costa County Planning Commission must approve the revised project. A change in the General Plan Amendment map to reflect the revised locations for single-family medium and high designations and the Water designation will require Board of Supervisors approval. The Town of Discovery Bay and RD 800 have expressed support for the modification and no opposition is anticipated.

### Other Changes since 2013 EIR Approval

Since the project was approved in 2013, the Central Valley Regional Water Quality Control Board (RWQCB) approved a permit for the Town of Discovery Bay to increase its wastewater discharge flows into Old River. The increase is necessary to accommodate anticipated new development

and the project. The RWQCB permit will allow wastewater discharge from new development to take place prior to construction of certain wastewater infrastructure improvements required by the discharge permit. The RWQCB permit is attached as **Appendix A**.

Additionally, the 2013 EIR identified several traffic mitigation measures that will require the applicant to financially contribute towards proposed road improvement projects throughout the region. At that time, some of these road improvement projects were being considered within the proposed update of the Bridge/Thoroughfare Fee Ordinance for the East County. Since the EIR certification, the 2013 East County Regional Area of Benefit Transportation Mitigation Fee Update was completed and the new fee ordinance was adopted. The changes to the 2013 EIR mitigation measures were updated accordingly in this addendum.

#### **Pending Project Approvals**

Pending project approvals and permits are expected in 2015 and include:

- pre-annexation agreements with the Town of Discovery Bay and RD 800
- Contra Costa Local Agency Formation Commission (LAFCO) boundary reorganization
- Section 404 permit from the U.S. Army Corps of Engineers

## **4 Required Findings for Use of an Addendum**

Section 15164 of the *State CEQA Guidelines* states that an addendum to an earlier EIR shall be prepared if some changes or additions are necessary to the previously certified document, but none of the conditions described in Section 15162 have occurred. Section 15162 of the *State CEQA Guidelines* identifies the conditions that require preparation of a subsequent EIR. A proposed change in a project will require preparation of a subsequent EIR if:

*A) The change in the project is substantial.*

Substantial changes in the project are those that would require major revisions of the 2013 EIR due to the involvement of new significant environmental effects, or if a substantial increase in the severity of previously identified significant effects has occurred.

*B) The circumstances under which the project is undertaken have substantially changed.*

Substantial changes in circumstances are those that would require major revisions of the 2013 EIR in order to describe and analyze new significant environmental effects, or any changes that would cause a substantial increase in the severity of the previously identified significant effects.

*C) New information of substantial importance, which was not known and could not have been known, with the exercise of reasonable diligence at the time the previous environmental document was approved, shows any of the following.*

- The project will have one or more significant effects not discussed in the previous EIR or negative declaration.
- Significant effects previously examined will be substantially more severe than shown in the previous EIR.
- Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative.

- Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Additionally, pursuant to Section 15163 of the *State CEQA Guidelines*, a lead agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:

- any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and
- only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

## 5 Modified Environmental Checklist Form

The purpose of the checklist is to evaluate the categories in terms of any “changed condition” (e.g., changed circumstances, project changes, or new information of substantial importance) that may result in a changed environmental effect (e.g., a new significant impact or substantial increase in the severity of a previously identified significant effect) that would require further environmental review (CEQA Guidelines Section 15162).

The questions posed in the checklist come from Appendix G of the *State CEQA Guidelines*. Answering a question with a “no” response does not necessarily mean that there are no potential impacts relative to the environmental resource category, but that there is no change in the condition or status of the impact since it was analyzed and addressed with mitigation measures in the Final EIR prepared for this project. Likewise, these environmental resource categories may be answered with a “no” in the checklist since the revised project description does not introduce changes that would result in a modification to the conclusion of the certified EIR.

### Explanation of Checklist Evaluation Categories

#### A) *Discussion in prior EIR and related documents.*

This column provides a cross-reference to the EIR and related document(s) where information and analysis may be found relative to the environmental issue listed under each topic.

#### B) *Do the proposed changes involve new impacts not previously identified?*

Pursuant to Section 15162, subdivision (a)(1), of the *State CEQA Guidelines*, this column indicates whether changes represented by the revised project will result in new significant environmental impacts not previously identified or mitigated by the EIR, or whether the changes will result in a substantial increase in the severity of a previously identified significant impact.

#### C) *New circumstances involving new impacts?*

Pursuant to Section 15162, subdivision (a)(2), of the *State CEQA Guidelines*, this column indicates whether there have been substantial changes with respect to the circumstances under which the project is undertaken, which will require major revisions to the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

*D) New information requirement requiring new analysis or verification?*

Pursuant to Section 15162, subdivision (a)(3)(A-D), of the *State CEQA Guidelines*, this column indicates whether new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the 2013 EIR was certified as complete, would result in any of the actions described above in Section 4.C.

If the additional analysis completed as part of this environmental review finds that the conclusions of the Final EIR remain the same and no new significant impacts are identified, or identified impacts are not found to be substantially more severe, or additional mitigation is not necessary, then the question would be answered “no” and no additional environmental document (supplemental or subsequent EIR) is required.

*E) Final EIR mitigation measures implemented or address impacts*

This column indicates whether the mitigation measures in the Final EIR would apply to the proposed changes evaluated in this EIR Addendum in order to minimize and reduce impacts.

**Findings**

There are no substantial changes proposed by the revised project or in the circumstances in which the project will be undertaken that require major revisions to the existing EIR, or preparation of a new subsequent or supplemental EIR, due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. As illustrated herein, the project is consistent with the findings of the 2013 EIR and would have similar construction-related and operational effects (Section 15162, subdivision (a), *State CEQA Guidelines*).

All mitigation measures from the 2013 EIR would remain in effect and would continue to mitigate proposed project modifications. As further discussed in the project description and in **Section XIV, Transportation and Traffic**, the 2013 East County Regional Area of Benefit Transportation Mitigation Fee Update was adopted. Accordingly, several traffic mitigation measures were modified in this addendum to include the updated fee information. However, no proposed project changes nor the 2013 East County Regional Area of Benefit Transportation Mitigation Fee Update would alter the conclusions and level of significance for traffic impact identified in the 2013 EIR. **Appendix B** includes the Mitigation, Monitoring, and Reporting Program (MMRP) from the 2013 EIR and outlines all of the project mitigation measures. Additionally, **Appendix B** includes the updated fee information per the 2013 East County Regional Area of Benefit Transportation Mitigation Fee Update.

**Conclusion**

Contra Costa County may approve the revised project, as presented, based on this addendum. The impacts of the proposed project remain within the impacts previously analyzed in the 2013 EIR (Section 15162, subdivision (b)(3), *State CEQA Guidelines*).

The currently proposed project does not require major revisions to the Pantages Bays Project EIR. No new significant information or changes in circumstances surrounding the project have occurred since certification of the EIR. The previous analysis completed for the project remains adequate under CEQA. However, the project applicant will remain obligated to comply with all applicable mitigation measures and conditions of approval contained within the 2013 EIR and further identified in this addendum.

## 6 Environmental Analysis

### I AGRICULTURE AND FOREST RESOURCES

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Yes	No	No	No	No mitigation required
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	Yes	No	No	No	No mitigation required
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	Yes	No	No	No	No mitigation required
d) Result in the loss of forest land or conversion of forest land to non-forest use?	Yes	No	No	No	No mitigation required
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	Yes	No	No	No	No mitigation required

**Discussion:** The 2013 EIR determined that the project site does not contain Prime Farmland, Unique Farmland, Farmland of Statewide Importance, forest land, and land under Williamson Act contract. While the site is currently zoned as General Agricultural District (A-2) and Heavy Agricultural District (A-3), the project site is not used for agricultural or timber harvesting. Additionally, the project applicant will request rezoning to Planned Unit District (P-1), consistent with adjacent residential properties.

The proposed modifications are associated with the construction technique used to build the shoring walls for the development and the layout of the site plan. While the construction technique and configuration of land would change, the project site's size and area of disturbance would remain the same as previously assessed. Consistent with the 2013 EIR, the project site is not used for agricultural production, does not contain any forest resources, and the project would continue to include a request for rezoning to a Planned Unit District (P-1). As a result, project modifications would not alter the overall conversion of land to residential use and no new impacts would result.

**Conclusion:** The project changes would not have an effect on agricultural and forest resources within the project site. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.

## II AIR QUALITY

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	Yes	No	No	No	No mitigation required
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Yes	No	No	No	No mitigation required
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Yes	No	No	No	Yes
d) Expose sensitive receptors to substantial pollutant concentrations?	Yes	No	No	No	Yes
e) Create objectionable odors affecting a substantial number of people?	Yes	No	No	No	No mitigation required

**Discussion:** The 2013 EIR determined that the project-related traffic may increase localized carbon monoxide (CO) concentrations. The highest 8-hour concentration with project implementation is predicted to be 3.6 parts per million (ppm). However, the results are well below the California ambient standard of 9.0 ppm. Odors associated temporary construction could be generated during architectural coating activities; however, the project would comply with Regulation 8, Rule 3 and minimize odor impacts. Land uses surrounding the site would not constitute a significant odor source. The project complies with the Bay Area Air Quality Management District (BAAQMD) 2010 Clean Air Plan (CAP) by adding transportation control measures (TCM) to improve bicycle and pedestrian access. Furthermore, the project would not conflict with the CAP as it is consistent with regional growth assumptions.

The 2013 EIR determined the project will result in an increase of reactive organic gases (ROG), a criteria pollutant for which the project region is in non-attainment in an applicable federal or state ambient air quality standard. Furthermore, the project will expose sensitive receptors to air toxic air contaminants (TAC) during construction. However, the average daily and annual maximum operational emissions do not exceed the BAAQMD significance thresholds, with the exception of ROG. Furthermore, **Mitigation Measures AQ-1 and AQ-2** would reduce the impacts to a less than significant level.



The proposed modifications are mostly associated with the layout of the proposed site plan and the construction technique used to build the shoring walls for the development. The project changes would not increase the operational level of traffic, since additional residential units are not proposed. Operational emissions are therefore anticipated to remain the same. Additionally, a potential import of up to 90,007 cubic yards per year of the fill materials is anticipated. Odors associated with temporary construction would continue to be generated during architectural coating activities, and the project would comply with Regulation 8, Rule 3 and minimize odor impacts. As discussed in **Section XII, Population and Housing**, growth projections would continue to be consistent with regional growth projections and would implement transportation control measures (TCMs), thus the project remains in compliance with the CAP.

If import of fill materials is required, automobile exhaust from additional truck trips may increase pollutant emissions during construction. While additional truck trips may increase CO emissions, the 2013 CO emissions estimates were approximately 40 percent lower than the California Ambient air quality standard threshold. Given this additional traffic is not expected to increase over this level. Air quality specialists at Illingworth & Rodkin prepared a memorandum (**Appendix C**) in September 2014 that quantifies potential increases in ROG and NO<sub>x</sub> (ozone precursors), PM<sub>10</sub>, PM<sub>2.5</sub> from additional hauling truck trips. **Table 4** summarizes air quality emissions owing to import of fill materials (90,007 cubic yards per year). The additional hauling truck trips would add 13.8 lbs/day of NO<sub>x</sub>. However, consistent with the 2013 EIR, the air quality memorandum found projected construction emissions to be below BAAQMD thresholds. Additionally, **Mitigation Measure AQ-2b** would require the project to use on-site equipment that would reduce NO<sub>x</sub> emissions by 20 percent.

According to Costa County Conditions of Approval (number 79), if the final grading plan and the actual grading is not balanced, then the applicant shall prepare an off-site dirt hauling plan (which will include the pavement analysis and any necessary road repair as required in Public Works Condition 102) for submittal to the County for its review and approval. The County also included Condition of Approval (number 9) that all haul trucks transporting soil, sand, or other loose material off-site shall be covered. Haul trucks would access the project site using Highway 4, approximately 1.5 miles away from the project site. Trucks would proceed onto Bixler Road, and then turn right onto Point of Timber Road to enter the project site.

While haul trucks traveling on Bixler Road and Point of Timber Road are adjacent to residential communities and may potentially increase air quality emissions, such increases would be intermittent and temporary during construction. Furthermore, the project would comply with Contra Costa County policies, best management practices, and approved mitigation measures for air quality.

Replacement of cement deep soil mixing shoring wall construction with the sheet pile shoring wall construction method would be consistent in terms of emissions evaluated in the 2013 EIR. Furthermore, the **Mitigation Measure AQ-1 and AQ-2** would continue to reduce the impacts to a less-than-significant level.

**Table 4 Construction Emissions with Haul Trips**

Construction Daily Emissions (pounds per day)				
Scenario	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO <sub>x</sub> )	Respirable Particulates (PM <sub>10</sub> )	Fine Particulates (PM <sub>2.5</sub> )
<b>Construction Emissions modeled in 2010 EIR</b>				
Construction – Grading, Trenching, Paving (includes import of soil) [mitigated] <sup>1</sup>	5.9 Unmitigated	50.3 Unmitigated	2.1 Unmitigated	2.0 Unmitigated
	5.9 Mitigated	40.2 Mitigated	2.1 Mitigated	1.2 Mitigated
<b>Additional Maximum Daily Construction Emissions for Proposed Changes (Hauling Material)</b>				
Potential Export/Import truck trips <sup>2</sup>	0.7	13.8	0.4	0.3
<b>Total Potential Construction Emissions with Proposed Project Changes</b>				
Construction – Grading, Trenching, Paving (includes import/export of soil)	<b>6.6</b>	<b>54</b>	<b>2.5</b>	<b>1.5</b>
BAAQMD Significance Thresholds	<i>54</i>	<i>54</i>	<i>82</i>	<i>54</i>
<i>Impact</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

- 1 For the purposes of the environmental review analysis, air quality modeling in the draft EIR was based over a 12-month period as worst case and most concentrated emissions from construction estimated using the URBEMIS2007 program. Therefore, the analysis assumes that project grading and site improvements would be completed within a 12-month period (April 1, 2012 to March 31, 2013). Assumes 90,007 cy yards of soil hauling per year from 20 miles away

Source: Illingworth & Rodkin, 2014

**Conclusion:** The project changes would not substantially increase the severity of the previously identified impacts to air quality in the 2013 EIR. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.

**III BIOLOGICAL RESOURCES**

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Yes	No	No	No	Yes
b) Have substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	Yes	No	No	No	Yes
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Yes	No	No	No	Yes
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Yes	No	No	No	No mitigation required
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Yes	No	No	No	Yes
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Yes	No	No	No	No mitigation required

**Discussion:** The 2013 EIR determined that the project was not located within the East Contra Costa County Habitat Conservation Plan (HCP)/Natural Community Conservation Plan (NCCP) inventory area and will not conflict with any HCP/NCCP. The project will not interfere with the pathway or corridor of migratory or resident species because the project site does not constitute a wildlife movement corridor. However, it was determined that the development of the project will have a significant impact on protected trees as many would be removed in order to widen Kellogg Creek. Additionally, the 2013 EIR determined that development of the project will have a significant impact on bank habitat because the project will remove approximately 9,720 linear feet of the 10,120 linear feet of existing habitat within the project area along Kellogg Creek, the East Contra Costa Irrigation District (ECCID) Dredge Cut/Intake Channel (Old Kellogg Creek), and Pantages Island. Mitigation measures were set in place to lessen both of these impacts to a less-than-significant level.

Development of the project would have significant impacts to a number of federal and/or state listed species, state/designated species of special concern, and protected birds. Such species include the vernal pool fairy shrimp, California red-legged frog, giant garter snake, western pond turtle, Swainson's hawk, and the western burrowing owl. Mitigation outlined in the EIR included plans to provide compensatory mitigation for the incidental take of the species habitat, to purchase credits from a mitigation bank or make a financial contribution to the East Contra Costa Habitat Conservancy, and require pre-construction surveys. Additionally, the project will have impacts on waters of the United States protected under the Clean Water Act, requiring permits from the US Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB).

The proposed modifications are mostly associated with the layout of the proposed site plan and the construction technique used to build the shoring walls for the development. As discussed in the project description, proposed modifications to the project no longer include plans to excavate land for the North Bay. Additionally, the shape of the South Bay and South Cove would change in relation to the surrounding residential units, as shown in the site plan comparison on **Figure 2**. While the configuration of proposed land uses would be slightly different from the 2013 EIR, the area of disturbance remains the same. Likewise, some of the land previously planned for bays or coves, is now proposed for residential use. The project modifications would not alter the acreage amount of open space, wetland mitigation area, and emergent marsh, nor increase the intensity of the land by increasing the number of residential units.

Although proposed project modifications would slightly reconfigure the layout plan, tree removal for nearly 80 trees is still required in order to construct bays, coves, infrastructure, and residential lots. As such, **Mitigation Measure BIO-1** would remain in place and continue to mitigate the potential impact to trees. Proposed modifications to the project would continue to require widening of existing creeks and would remove low, moderate, and high quality bank habitat. As a result, **Mitigation Measure BIO-2** would remain in place and includes plans to create new bank habitat on-site and riparian plantings. Furthermore, although slightly less acres of water are proposed, project modifications would not avoid impacts to waters of the United States and State of California. Therefore, **Mitigation Measure BIO-12** is still valid and the project would require an authorization from the USACE and the RWQCB.

The proposed modifications to the project would not affect the impact determination to biological species from the 2013 EIR because the area of disturbance remains the same. However, the new construction method would require the use of a variable moment hammer to install the shoring walls to support the bays and coves, as discussed in **Section XI, Noise and Vibration**, of this

addendum. A variable moment hammer is similar to a vibratory pile driver or vibratory hammer, but less intrusive. According to the Federal Transit Administration Transit Noise and Vibration Manual<sup>4</sup>, a vibratory pile driver produces a peak particle velocity (ppv) between 0.170 – 0.734 inches per second (in/s) at 25 feet. It is likely that the vibratory pile driver or variable moment hammer would produce a vibration level on the lower-end of this range at the project site due to the soil type of the underlying site. Generally, clay-like soil types, as found at the Pantages Bays site, respond well the vibratory pile driving construction technique because they have little shear strength and allow the sheet pile to pass through easily. While continuous operation at a fixed frequency may be more noticeable, even at lower vibration levels, sensitive receptors would slightly perceive vibration at a distance of about 150 feet.

Incidental takes to several species are already fully mitigated with proposed measures and compensatory mitigation areas, credits, and/or fees would be provided. Such mitigation would cover potential vibration impacts to vernal pool fairy shrimp, California red-legged frog, giant garter snake, western pond turtle, raptors, Swainson's hawk, western burrowing owl, and several noted fish species. **Mitigation Measures BIO-8 through BIO-11** of the 2013 EIR requires pre-construction surveys and limits construction to the breeding season. Such mitigation would provide protection to nesting bird from potential vibration impacts associated with the new construction methods. Additionally, a buffer area radius is required around all nesting areas during construction, which would also mitigate potential vibration. As a result, **Mitigation Measures BIO-1 through BIO-12** would continue to reduce the impact to a less-than-significant level with the new project modifications. Therefore, additional impacts to biological resources beyond what was assessed in the 2013 EIR would not occur.

**Conclusion:** The project changes would not substantially increase the severity of the previously identified impacts to biological resources in the 2013 EIR. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.

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<sup>4</sup> Federal Transit Administration, 2006. Transit Noise and Vibration Impact Assessment. Available [http://www.fta.dot.gov/documents/FTA\\_Noise\\_and\\_Vibration\\_Manual.pdf](http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf)

## IV CULTURAL RESOURCES

Issues and Supporting Information Sources	Discussion in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the State CEQA Guidelines?	Yes	No	No	No	Yes
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the State CEQA Guidelines?	Yes	No	No	No	Yes
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Yes	No	No	No	Yes
d) Disturb any human remains, including those interred outside of formal cemeteries?	Yes	No	No	No	Yes

**Discussion:** Site surveys and archival research from the 2013 EIR confirmed that no known archaeological or paleontological resources exist on the project site. Additionally, no structure or site is eligible for listing on the National Register of Historic Places (NRHP) or the California Register of Historic Resources (CRHR). However, since there is always a possibility to uncover unknown cultural resources within the project site, **Mitigation Measure CUL-1** through **Mitigation Measure CUL-4** would reduce the impact to a less-than-significant level.

The proposed modifications are mostly associated with the site layout and the construction technique used to build the shoring walls for the development. Additionally, more detailed project plans specify a likely maximum bay depth of 33 feet in some locations, with a minimum bay depth of -11 feet for boat keel clearance. While the configuration of proposed land uses would be slightly different and the depth of the bay would increase from the 2013 EIR, the overall area of disturbance remains the same. Therefore, the previous site surveys and archival research remain valid because the project modifications do not expand the project site's size. As a result, the potential risk of uncovering cultural resources during grading, excavation, or construction is still a possibility. Therefore, **Mitigation Measure CUL-1** through **Mitigation Measure CUL-4** would continue to reduce any potential impact to a less-than-significant level.

**Conclusion:** The project changes would not cause a substantial adverse change in the significance of a historical or archaeological resource; directly or indirectly destroy a unique paleontological resource, site, or geologic feature; or disturb any human remains from what was previously analyzed in the 2013 EIR. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.

**V GEOLOGY AND SOILS**

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	Yes	No	No	No	No mitigation required
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	Yes	No	No	No	No mitigation required
ii) Strong seismic ground shaking?	Yes	No	No	No	Yes
iii) Seismic-related ground failure, including liquefaction?	Yes	No	No	No	Yes
iv) Landslides?	Yes	No	No	No	No mitigation required
b) Result in substantial soil erosion or the loss of topsoil?	Yes	No	No	No	Yes
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Yes	No	No	No	Yes
d) Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial risks to life or property?	Yes	No	No	No	Yes
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	Yes	No	No	No	No mitigation required



**Discussion:** The 2013 EIR determined the project site is not within an Alquist-Priolo Earthquake Fault Zone, would not subject people or structures to landslides because the project site is generally flat and there is no history of landslides in the vicinity of the Discovery Bay. The project will not require septic tanks or alternative waste water disposal systems because the project will connect with municipal wastewater collection and treatment systems. Accordingly, the 2013 EIR determined no impacts to these resources.

The project site contains underlying soil comprised of loose dune sands, alluvial sands, and unconsolidated material that are prone to liquefaction, lateral spreading, and expansive soil effects. Therefore, the 2013 EIR found that implementation of the project could expose people and developments to strong ground shaking and seismic-related liquefaction or lateral spreading. Additionally, development of the project site could result in substantial soil erosion or loss of topsoil because the project would construct private streets, residences, and waterways will temporarily increase the amount of exposed (unvegetated surfaces) leading to increased sedimentation in receiving water bodies. Although these impacts are significant, **Mitigation Measures GEO-1 through GEO-3** would reduce these impacts to a less-than-significant level.

Proposed modifications to the project are mostly associated with the site layout and the construction technique used to build the shoring walls for the development. Additionally, more detailed project plans specify a likely maximum bay depth of 33 feet in some locations, with a minimum bay depth of -11 feet for boat keel clearance. ENGEO conducted an updated geotechnical report in June 2014 with the modified project site plans, which addresses comments from the Contra Costa County Geologic Peer Review from May 2014. The analysis evaluated sheet pile embedment and the stability of slopes and found that the sheet pile method would adequately retain the lots above elevation -1 feet. The project site continues to be outside an Alquist-Priolo Earthquake Fault Zone, the topography of the land has not changed, and project modifications would not alter plans to connect proposed residences to municipal wastewater and treatment systems.

While project modifications would change the construction technique and the configuration of the project site, the existing soil and geographic conditions of the project site have not changed. The underlying soil continues to be comprised of loose, unconsolidated materials that are prone to liquefaction, lateral spreading, and expansive soils. Therefore, the proposed project could still potentially expose people and structures to these conditions. As discussed in the project description, the configuration of the bays, coves, and residences would slightly change; however, construction of these features could still lead to increased erosion leading to sedimentation of in nearby water bodies. As a result, the impacts would remain significant and **Mitigation Measures GEO-1 through GEO-3** would reduce these impacts to a less-than-significant level.

**Conclusion:** The project changes would not substantially increase the severity of the previously identified impacts related to geology in the 2013 EIR. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.

## VI GREENHOUSE GAS EMISSIONS

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Yes	No	No	No	Yes
b) Conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases?	Yes	No	No	No	Yes

**Discussion:** The 2013 EIR determined that the project would contribute to regional and global increases in greenhouse gas (GHG) emissions. The project will generate new residents, resulting in increased per capita CO<sub>2</sub> emissions. The project will implement **Mitigation Measures CUM GCC-1a and 1b**, which includes energy efficiency measures to reduce project emissions. However, impacts would continue to be significant and unavoidable.

The proposed modifications are mostly associated with the site layout and the construction technique used to build the shoring walls for the development. Additionally, modifications would accommodate a potential import of fill materials (90,007 cubic yards per year). Such activities would potentially increase greenhouse gas emissions; however, the project would continue to comply with **Mitigation Measures CUM GCC-1a and 1b** that would reduce project emissions with water usage/quality standards, energy efficiency measures, and environmental pollution reduction standards. Nonetheless, impacts would continue to be significant and unavoidable.

**Conclusion:** The project changes would not substantially increase the severity of the previously identified impacts to greenhouse gas emissions in the 2013 EIR. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.

**VII HAZARDS AND HAZARDOUS MATERIALS**

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Yes	No	No	No	No mitigation required
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Yes	No	No	No	Yes
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school?	Yes	No	No	No	Yes
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Yes	No	No	No	No mitigation required
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	Yes	No	No	No	No mitigation required
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	Yes	No	No	No	No mitigation required
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Yes	No	No	No	No mitigation required

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	Yes	No	No	No	No mitigation required

**Discussion:** The 2013 EIR determined that the project site does not contain a hazardous material site pursuant to Government Code Section 65965.5. Additionally, the project site is located within an airport land use plan, airport, or private airstrip that would impact safety represent a hazard. Additionally, the project will not affect emergency response plans because the project is designed to comply with the County and the Fire Departments standards for roadways and emergency vehicle access. Furthermore, the General Plan does not identify this project site as a high-risk zone for wildland fires. Therefore, the project would not expose people or structures to a significant loss, injury, or death involving fires. While demolition activities could potentially result in the disposal of hazardous materials, no hazardous materials would be stored on the project site and would be labeled correctly.

The proposed project could potentially cause the release of hazardous materials into the environment during demolition, grading, and construction activities. Additionally, the project site is located within a quarter-mile from Timber Point Elementary School. However, **Mitigation Measures HAZ-1** through **HAZ-3** identified in the 2013 EIR would reduce these impacts to a less-than-significant level.

The proposed modifications are mostly associated with the site layout and the construction technique used to build the shoring walls for the development. Additionally, more detailed project plans specify a likely maximum bay depth of 33 feet in some locations, with a minimum bay depth of -11 feet for boat keel clearance. Existing conditions remain the same as described in the 2013 EIR. As shown on **Figure 2**, the initially proposed emergency vehicle access road and pedestrian trail is now just a pedestrian trail. An emergency vehicle access through the proposed open space and emergent marsh is no longer necessary due to reconfigured street alignments. Project modifications allow for emergency vehicles to access residences along Point of Timber Road as well as in the southwest portion of the project site and near the marine patrol station. As such, the project would provide adequate emergency access to the entire project site.

As a result, project modifications still allow adequate emergency vehicle access and there is no impact. Additionally, the County still has not adopted an emergency response plan for the Discovery Bay area. While the construction technique has slightly changed, implementation of the project would still require demolition, grading, and construction activities that could potentially cause a release of hazardous materials. The proposed modifications include the potential to import the fill dirt (90,007 cubic yards per year) from offsite locations. However, these trucks would not be transporting hazardous materials and would comply with applicable regulations as needed.

As a result, **Mitigation Measures HAZ-1** and **HAZ-2** would continue to mitigate the impacts to a less-than-significant level.

**Conclusion:** The project changes would not substantially increase the severity of the previously identified impacts related to hazards and hazardous materials in the 2013 EIR. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.

**VIII HYDROLOGY AND WATER QUALITY**

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Violate any water quality standards or waste discharge requirements?	Yes	No	No	No	No mitigation required
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	Yes	No	No	No	No mitigation required
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	Yes	No	No	No	No mitigation required
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	Yes	No	No	No	No mitigation required
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	Yes	No	No	No	No mitigation required
f) Otherwise substantially degrade water quality?	Yes	No	No	No	Yes

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate map or other flood hazard delineation map?	Yes	No	No	No	Yes
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	Yes	No	No	No	No mitigation required
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	Yes	No	No	No	No mitigation required
j) Inundation by seiche, tsunami, or mudflow?	Yes	No	No	No	No mitigation required

**Discussion:** The 2013 EIR considered hydrodynamics of the of the proposed 46.8 acres of bays and coves of the project in combination with the widening of Kellogg Creek, as well as 70 acres of impervious surface. The 2013 EIR determined that the wastewater generated by the project will not violate any water quality or waste discharge standards. Additionally, the project will not deplete or interfere with groundwater supplies. Furthermore, the 2013 EIR indicated that the project will include a storm water drainage and treatment system and thus will not connect to an existing or planned water drainage system, and therefore not contribute or exceed its capacity. The project's proposed drainage system was designed to comply with National Pollution Discharge Elimination System (NPDES) and the County's C.3 requirements; therefore surface and storm water runoff will not be discharged into the emergent marsh or mitigation areas. Therefore, adherence to drainage system plan and applicable regulations will reduce operational impacts to less-than-significant.

The 2013 EIR determined that excavation of new bays and coves of the project site, in combination with the widening of Kellogg Creek, will result in increased residence time in the Discovery Bay Area. The upstream tidal prism of Kellogg Creek and existing adjacent bays and coves of Discovery Bay is the principal force that controls the flood velocities in Indian Slough between inflowing tidal water and discharge. In other words, a tidal prism is the volume of water in the creek between mean high tide and mean low tide. Overall, the 2013 EIR determined that post-development flow conditions will increase the tidal prism of Kellogg Creek and existing adjacent bays and coves because more water would pass through Indian Slough at a slightly faster velocity. However, such increase to the tidal prism will not create an increase in net erosion, but will reduce erosion of water banks and fast tidal currents.

The project site is located within a 100-year flood zone that is not protected by an outside levee. However, the applicant designed the project to exceed the base flood event of a 300-year storm event with implementation of design techniques. Potential flooding from failure of a levee or dam was also considered less than significant. Furthermore, the project site would not likely be affected by tsunamis, sieche, or landslides because of the topography and geography of the project site. Significant impacts were identified with regard to erosion and water quality from construction-related activities, such as excavation and widening of Kellogg Creek. Additionally, abandoned groundwater wells on the project site could act as a conduit for pollutants to groundwater, if not properly decommissioned. However, mitigation was set in place to reduce these impacts to a less-than-significant level.

The proposed project changes are related to the technique to construct the residential developments as well as the layout configuration of the proposed development. The proposed modifications would include a reduction in the amount of acres of water to 37.6 acres, as shown in **Table 3**. The amount of impervious surface would increase as part of the proposed project modifications; however, all surface water runoff from the project site would continue to drain into the approved storm water drainage and treatment system. Project generated wastewater would not violate any wastewater discharge requirements as wastewater is accepted and treated by the Discovery Bay Wastewater Treatment Facility and is currently operating in compliance with all RWQCB regulations. The proposed modifications do not include new water wells or access to groundwater through existing wells. While the amount of impervious surface would increase from 17.4 acres to 18.7 acres (7.4 percent increase), groundwater recharge is not feasible at the project site due to the low permeability of the site's clay soils. Furthermore, the storm water drainage and treatment system that is developed for the project would be designed to calibrate and adjust for the additional drainage.

As discussed in the project description, proposed modifications to the project no longer include plans to excavate land for the North Bay. Additionally, the shape of the South Bay and South Cove would change in relation to the surrounding residential units, as shown in the site plan comparison on **Figure 2**. Therefore, proposed residence times would decrease because less acres of water would be present. As discussed, the project modifications would still include widening of Kellogg Creek and creation of the North Cove, South Bay, and South Cove. Therefore, project modifications would not change erosion impacts from tidal influences because tidal activity is largely influenced by the widening of Kellogg Creek in Indian Slough. All widening activities would remain in compliance with RD 800 standards.

The applicant does not propose changes to the proposed drainage system; therefore, surface and storm water runoff would continue to not be discharged into the emergent marsh or mitigation areas, as previously assessed in the 2013 EIR.

As discussed in the project description, the project site is subject to sea level rise. As a result, the cement deep soil mixing shoring wall construction method was no longer preferred upon further evaluation. It was determined unfeasible due to complications associated with the design of the shoring wall as projected sea level increase required the shoring wall to be taller and therefore, more difficult to implement. The new construction method is expected to provide better protection from sea level rise and is therefore assessed in this addendum. The 2013 EIR **Mitigation Measures HYD-3a and 3b** include plans for minimum elevations of residential



units and street levels with regard to flooding and sea level rise. These minimum elevations would not be changed as a result of project modifications. Furthermore, the geography and topography of the site have not changed that would alter the project's susceptibility to tsunamis, sieche, or landslides.

Although the project modifications specify a maximum excavation depth of 33 feet, the same erosion potential would occur as excavation activities to construct bays and coves would still potentially suspend soils in the water. As a result, proposed modifications to the project may still have the potential to affect the water quality in Kellogg Creek. **Mitigation Measures HYD-1a, 1b, and 1c** would continue to mitigate these potential impacts with soil stabilizing methods, compliance with the Storm Water Pollution Prevention Plan (SWPPP), etc. Additionally, the proposed project modifications include no changes to the abandoned groundwater wells on the project site. **Mitigation Measure HYD-2** would continue to require proper decommissioning of these wells.

**Conclusion:** The project changes would not substantially increase the severity of the previously identified impacts related to hydrology and water quality in the 2013 EIR. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.

**IX LAND USE AND PLANNING**

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Physically divide an established community?	Yes	No	No	No	No mitigation required
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	Yes	No	No	No	No mitigation required
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	Yes	No	No	No	No mitigation required

**Discussion:** The 2013 EIR determined that implementation of the project will continue the residential pattern of development that is already defined by existing residential development to the east, west, and south of the vacant project site. The project site is located outside the inventory area of the HCP/NCCP; however, would make a financial contribution to the East Contra Costa County Habitat Conservancy as mitigation to species, as noted in **Section III, Biological Resources**, of this addendum. As a result, the 2013 EIR determined that the project will not physically divide a community and will not conflict with a habitat conservation plan or natural community conservation plan and no impacts will occur. Additionally, the project proposed a general plan amendment from the current land use designation to Single-Family Residential – Medium Density (SM), Single-Family Residential – High Density (SH), Water (WA), Public/Semi-Public (PS), and Open Space (OS) as well as a rezoning approval to Planned Unit District. Approval of these will ensure consistency with applicable land use plans, policies, and regulations.

The proposed modifications are mostly associated with the site layout and the construction technique used to build the shoring walls for the development. As discussed in the project description and summarized in **Table 3**, the proposed project would slightly shift the acreage amount within each proposed land use designation type. However, this reconfiguration would result in the same amount of overall acreage of 171.2 acres. The Contra Costa County General Plan Land Use Element has not changed. Additionally, implementation of the project would still require a general plan amendment and rezoning approvals. As a result, project modifications would not alter the conclusions of the 2013 EIR and no new impacts would occur.

**Conclusion:** The project changes would not have an effect on land use and planning within the project site. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.

**X MINERAL RESOURCES**

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Yes	No	No	No	No mitigation required
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	Yes	No	No	No	No mitigation required

**Discussion:** The 2013 EIR determined that the project would have no impacts to mineral resources within the project site. The project site is not classified or designated within a mineral resource zone and does not have a history of mining. Therefore, the project will not impact mineral resources and will not result in the loss of a locally important resource recovery site.

The proposed modifications are mostly associated with the site layout and the construction technique used to build the shoring walls for the development. Additionally, more detailed project plans specify a likely maximum bay depth of 33 feet in some locations, with a minimum bay depth of -11 feet for boat keel clearance. While the configuration of proposed land uses would be slightly different and the depth of the bay would increase from the 2013 EIR, the overall area of disturbance remains the same. Therefore, the project site is still within an area not classified or designated within a mineral resource zone and does not have a history of mining. No new impacts to mineral resources would result.

**Conclusion:** The project changes would not have an effect on mineral resources within the project site. Accordingly, Contra Costa County finds the following.

A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.

B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.

C) None of the proposed project changes would significantly affect this environmental resource.

**XI NOISE AND VIBRATION**

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Yes	No	No	No	No mitigation required
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Yes	No	No	No	No mitigation required
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	Yes	No	No	No	No mitigation required
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Yes	No	No	No	Yes
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Yes	No	No	No	No mitigation required
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	Yes	No	No	No	No mitigation required

**Discussion:** The 2013 EIR considered noise and vibration effects from operation and construction of the project. Noise measurements from the 2013 EIR indicated that existing community noise equivalent levels (CNEL) are between 45 and 53 decibels (dBA). Once in operation, residential developments were not expected to alter existing noise levels. However, project operation-related noise will increase as a result of increased traffic and watercrafts. The 2013 EIR determined that the noise associated with this operation would be temporary and sporadic, and will not result in permanent changes to the ambient noise levels. The 2013 EIR considered a

construction method that will utilize a cement deep soil mixing (CDSM) technique and noise effects will mostly occur from excavation, dredging by bulldozers, and scrapers (for construction of homes, bays, coves, and waterways). The CDSM method introduces and mixes cement-type materials with local soils by drilling overlapping columns and mixing soil-cement in place. This operation involves approximately two large tractor/cranes, pumping equipment to deliver the soil-cement mixture, and small work trucks to move personnel and equipment around the job site. The noise assessment used screening assessments at 50 feet (representative of homes to the west of the project site) and 300 feet (representative homes across Kellogg Creek to the east of the project site). The assessment found a temporary and periodic increase in ambient noise levels due to construction as noise levels would exceed 75 dBA at 50 feet (decreases by 6 dBA per doubling distance). This was considered a significant impact, but mitigation will reduce to a less-than-significant level. The 2013 EIR assessed potential vibration effects as well and determined that the project does not include any components that would generate excessive groundborne vibration. Furthermore, the project site is not within an airport land use plan, within 2 miles of an airport, or within the vicinity of a private airstrip.

The proposed modifications are mostly associated with the site layout and the construction technique used to build the shoring walls for the development. Qualified acoustic consultants at Illingworth & Rodkin reviewed the noise and vibration analysis presented below, and concurred with the findings and conclusions.<sup>5</sup> Once the project is in operation, the reconfigured layout plan of the development would continue to have residential use. Therefore, consistent with the 2013 EIR, the project would not substantially alter existing noise levels. The construction technique would no longer utilize the cement deep soil mixing technique and would adopt the “sheet pile shoring wall” technique. This technique requires the use of a variable moment hammer (similar to a vibratory pile driver or vibratory hammer, but less intrusive). According to the FHWA Construction Noise Handbook<sup>6</sup>, a vibratory pile driver generates a maximum instantaneous noise level of 101 dBA L<sub>max</sub> at 50 feet. A variable moment hammer would produce lower noise and vibration effects in comparison to the standard vibratory pile driving approach. Thus, this addendum presents a conservative noise and vibration analysis by evaluating the effects from a vibratory pile driver. As described in the project modifications, a variable moment hammer minimizes radial vibration in the surrounding native soil and maximizes the drivability of the pile with limited impact on nearby resources because it has no amplitude when the hammer is started or stopped. In comparison to the 2013 EIR, the estimated construction noise level would continue to be above 75 dBA at a distance of 50 feet. As a result, **Mitigation Measures NOI-1a** through **NOI-1C** would continue to mitigate potential construction noise effects to a less-than-significant level.

According to the Federal Transit Administration Transit Noise and Vibration Manual<sup>7</sup>, a vibratory pile driver produces a peak particle velocity (ppv) between 0.170 – 0.734 inches per second (in/s) at 25 feet. It is likely that the vibratory pile driver or variable moment hammer would produce a vibration level on the lower-end of this range due to the soil type of the underlying site. Generally, clay-like soil types, as found at the project site, respond well to the vibratory pile

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<sup>5</sup> Thill, Michael. Principal. Illingworth & Rodkin. October 15, 2014 – email communication

<sup>6</sup> Federal Highway Administration, 2011. Default Noise Emission Reference Levels and Usage Factors. Available [http://www.fhwa.dot.gov/environment/noise/construction\\_noise/handbook/handbook09.cfm](http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm)

<sup>7</sup> Federal Transit Administration, 2006. Transit Noise and Vibration Impact Assessment. Available [http://www.fta.dot.gov/documents/FTA\\_Noise\\_and\\_Vibration\\_Manual.pdf](http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf)

driving construction technique because they have little shear strength and allow the sheet pile to pass through easily. While continuous operation at a fixed frequency may be more noticeable, even at lower vibration levels, sensitive receptors would slightly perceive vibration at a distance of about 150 feet. Furthermore, the vibration threshold to potentially cause cosmetic damage to a building is 0.3 in/sec ppv, as shown in **Table 5**. As shown on **Figure 4**, the proposed shoring walls would be installed at a distance between approximately 200 – 400+ feet away from existing residences and sensitive receptors. Accordingly, the vibration level of a vibratory pile driver or variable moment hammer at a distance of 200 feet translates to a ppv level of approximately 0.01 in/s. As a result, the vibration level from vibratory pile driving at 200 feet would be slightly perceptible assuming typical pile driving conditions. Potential vibration impacts from construction were found to result in a less-than-significant impact because receptors in adjacent residential areas would be at least 200 feet away from construction activities and not exposed to vibration levels that would annoyance due to perceptibility or cosmetic damage to structures.

**Table 5    Vibration Levels**

Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.1	Strongly perceptible	Virtually no risk of damage to normal buildings
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential dwellings such as plastered walls or ceilings
0.5	Severe - Vibrations considered unpleasant	Threshold at which there is a risk of damage to newer residential structures

Source:Transportation- and Construction-Induced Vibration Guidance Manual, California Department of Transportation, June 2004.

As discussed in the project description, the project modifications include the potential import of up to 90,007 cubic yards per year of fill. According to the Air Quality Memorandum (**Appendix C**), the number of hauling trips in one year was computed as 5,625 round trips. Haul trucks would access the project site using Highway 4, approximately 1.5 miles away from the project site. Trucks would proceed onto Bixler Road, and then turn right onto Point of Timber Road to enter the project site. While haul trucks traveling on Bixler Road and Point of Timber Road are adjacent to residential communities and may increase noise levels for these residents, such increases would be intermittent, temporary, and would comply with Contra Costa County noise policies. Furthermore, the applicant would comply with Costa County Conditions of Approval (number 44) and **Mitigation Measure NOI-1b**, to minimize noise at existing noise sensitive locations. The project applicant shall limit trucks to routes, hours, and days of the week set by the county. The project would continue to comply with the General Plan policy 11-8 as well that construction

activities should be concentrated during the hours of the day that are not noise-sensitive for adjacent land uses and should be commissioned to occur during normal work hours of the day to provide relative quiet during the more sensitive evening and early morning periods.

**Conclusion:** The project changes would not substantially increase the severity of the previously identified impacts related to noise and vibration in the 2013 EIR. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.



**XII POPULATION AND HOUSING**

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Yes	No	No	No	No mitigation required
b) Displace substantial numbers of existing housing, necessitating the construction of the replacement housing elsewhere?	Yes	No	No	No	No mitigation required
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	Yes	No	No	No	No mitigation required

**Discussion:** The 2013 EIR determined that the project will not displace any existing housing or people because the project site is vacant. The project will directly increase the population through development of 292 residential units. However, the population generated by the project is within population forecasts for the county as a whole. Additionally, the project may indirectly increase growth due to extension of municipal services and roads to a previously undeveloped area. These types of extensions may potentially induce growth in adjacent areas. However, the project is an infill development and adjacent lands are either developed with residential uses or are located outside the urban limit line, which prevents future development. Therefore, direct and indirect growth impacts are considered less than significant.

The proposed modifications are mostly associated with the site layout and the construction technique used to build the shoring walls for the development. As discussed in the project description and summarized in **Table 3**, the proposed project would slightly shift the acreage amount within each proposed land use designation type. Likewise, the amount of single family high land use designation acres would increase from 34.0 acres to 45.5 acres; the amount of single family medium land use designation acres would decrease from 46.3 acres to 42.3 acres. However, the project would result in the same amount of overall acreage of 171.2 acres. The proposed increase of higher density residential units would be slightly offset by the decrease in single family medium units and the project still proposes 292 units; therefore, this addendum assumes no further population increase from project modifications. Additionally, the project would continue to be included in county population forecasts and the reconfiguration. As a result, the amount of potential residents would not substantially increase from the previously proposed project. Project modifications would not alter the conclusions of the 2013 EIR and no new impacts would occur.

**Conclusion:** The project changes would not have an effect on population and housing within the project site. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.

**XIII PUBLIC SERVICES AND RECREATION**

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?:	Yes	No	No	No	No mitigation required
i) Fire protection?	Yes	No	No	No	No mitigation required
ii) Police protection?	Yes	No	No	No	No mitigation required
iii) Schools?	Yes	No	No	No	No mitigation required
iv) Parks?	Yes	No	No	No	Yes
v) Other public facilities?	Yes	No	No	No	No mitigation required
b) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Yes	No	No	No	No mitigation required
c) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Yes	No	No	No	No mitigation required

**Discussion:** The 2013 EIR determined that the project will generate a small increase in demand for fire protection, emergency services, police services, school services, and public facilities. With regard to fire protection and emergency services, the increase in population will not require additional staff, acquisition of new equipment, or construction of new facilities. The proposed project will supply adequate emergency access to the project site through Point of Timber Road. With regard to police services, the project proposed 116 docks with deep water access and will require additional marine patrol. The applicant proposed a marine patrol substation at the northeasterly point of the project site, as part of the project description to service the residents within the area. Potential environmental impacts from construction of the substation are assessed in the 2013 EIR and are considered less than significant. Implementation of the project will not require the construction of any school facilities because nearby schools have adequate capacity to serve additional students. Additionally, as confirmed by SB 50, Pantages Bays LLC agrees to pay school impact fees and would reduce the impact to a less-than-significant level. The project could also increase demand for library services and health facilities; however, these impacts were considered less than significant.

Contra Costa County contains several recreational areas in close proximity to the project site. The 2013 EIR determined that sufficient park resources are available for the proposed residents and the applicant would adhere to the Contra Costa County's parkland requirement of 3 acres per 1,000 people. As a result, **Mitigation Measure PS-1** will provide an approximately 2.6-acre public recreational trail available for use by the new residents and public. The trail will also serve as a 20-foot emergency vehicle access road through the proposed wetland mitigation/open space area.

The proposed modifications are mostly associated with the site layout and the construction technique used to build the shoring walls for the development. As discussed in **Section XII, Population and Housing**, of this addendum, the project modifications would not change the number of residential units from the previously approved project. Proposed modifications would reconfigure the site plan that an emergency vehicle access road through the proposed open space and emergent marsh is no longer necessary given the revised street alignments. The Point of Timber Road would serve as the emergency vehicle access road because it would be extended to access proposed residences along C Street, C Court, E Street, D Street, and D Court. Additionally, the project continues to include plans for a marine substation and emergency vehicle access to that location. In compliance with SB 50, Pantages Bays LLC would continue to pay school impact fees. Therefore, no additional fire protection, emergency services, police services, school services, and public facilities fire, are required beyond what was assessed in the 2013 EIR.

An increased amount of landscaped open space/recreational is proposed adjacent to the gated vehicular entry point at Point of Timber Road and B Street. Accordingly, the reconfigured layout of the South Bay would open public views of the water for users of the open space/recreational area near the entry point. Furthermore, the applicant would continue to comply with, **Mitigation Measure PS-1** to provide an approximately 2.6-acre public trail available for use by the new residents and public. However, proposed modifications would change the trail to only allow access to bicycles and pedestrians because the proposed 20-foot emergency vehicle access road is longer required. The emergency vehicle access at the northeasterly portion of the project site near the marine patrol substation and A Court would still be included. The Contra Costa County Fire Protection District reviewed project modification maps in May 2014 and concluded that proposed roadways comply with Fire District requirements. Project modifications would not alter the conclusions of the 2013 EIR and no new impacts would occur.

**Conclusion:** The project changes would not have an effect on public services and recreation within the project site. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.

**XIV TRANSPORTATION AND TRAFFIC**

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	Yes	No	No	No	Yes
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	Yes	No	No	No	Yes
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	Yes	No	No	No	No mitigation required
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Yes	No	No	No	No mitigation required
e) Result in inadequate emergency access?	Yes	No	No	No	No mitigation required
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	Yes	No	No	No	No mitigation required

**Discussion:** The 2013 EIR determined that the project does not involve aircraft or activities that will affect air traffic patterns. The project proposed neighborhood roads, cul-de-sacs, and bicycle lanes. However, there would be no impact regarding hazardous design features because the low traveling speeds (25 mph), pedestrian buffers, and compliance with the Caltrans Highway Design Manual will provide adequate safety measures. The project will construct an EVA in the northwest and southwest portion of the project site as well as a 20 foot wide pedestrian/EVA trail (through the emergent marsh). As such, the project would provide adequate emergency access to the entire project site, as further discussed in **Section XIII, Public Services and Recreation**. The project will not include plans for transit, but will support pedestrian and bicycle access. Existing bus service on Tri Delta Transit serves the project site, but operates well under capacity and could accommodate generated trips by the project. The 2013 EIR determined that the project will increase traffic volumes and worsen level of service (LOS) at SR4/Byron Highway and Vasco Road. These impacts will remain significant and unavoidable with **Mitigation Measures TRA-1 and TRA-2**. Implementation of the project will increase traffic volumes on rural roads as well, but **Mitigation Measure TRA-3** will reduce to a less-than-significant level.

The proposed modifications are mostly associated with the site layout and the construction technique used to build the shoring walls for the development. Project modifications do not include aircraft or activities that will affect air traffic patterns. While project modifications include a reconfiguration of roadways, the neighborhood roads would include the same design features as previously assessed in the 2013 EIR. As shown on **Figure 2**, the initially proposed emergency vehicle access road and pedestrian trail is now just a pedestrian trail. An emergency vehicle access through the proposed open space and emergent marsh is no longer necessary due to reconfigured street alignments. Project modifications allow for emergency vehicle access vehicles to access residences along Point of Timber Road as well as in the southwest portion of the project site and near the marine patrol station. As such, the project would provide adequate emergency access to the entire project site. Additionally, the project modifications would enhance plans for pedestrian and bicycle services, because the trail through the emergent marsh would no longer include vehicle access. Project changes would not alter the amount of projected population to an extent that it could no longer accommodate generated trips by the project. If import of fill materials is required, additional truck trips may occur during construction, which may increase traffic volumes on nearby roadways. Haul trucks would access the project site using Highway 4, approximately 1.5 miles away from the project site. Trucks would proceed onto Bixler Road, and then turn right onto Point of Timber Road to enter the project site. However, additional truck trips would only last the duration of construction. **Mitigation Measures TRA-1 through TRA-3** would continue to lessen the impacts; however, impacts to SR4/Byron Highway and Vasco Road would remain significant and unavoidable.

The 2013 EIR identified several traffic mitigation measures that will require the applicant to financially contribute towards proposed road improvement projects throughout the region. At that time, some of these road improvement projects were being considered within the proposed update of the Bridge/Thoroughfare Fee Ordinance for the East County. Since the EIR certification, the 2013 East County Regional Area of Benefit Transportation Mitigation Fee Update was completed and the new fee ordinance was adopted. The mitigation measures in the 2013 EIR were updated accordingly in this addendum. The changes to the mitigation measures are shown in the following format: additions are underlined; deletions are shown in ~~striketrough~~. While such traffic mitigation measures were clarified to account for the new information, no proposed project changes would alter the traffic impact findings from the 2013 EIR.

**Mitigation Measure TRA-1:** Mitigation of the unacceptable traffic conditions at the SR4/Byron Highway (south) can be achieved by adding a second northbound to westbound left-turn lane from Byron Highway onto SR4 and its associated receiving lane. This improvement is included in the 2013 East County Regional Area of Benefit (ECRAOB) Transportation Mitigation Fee Update project list. ~~currently identified in the 2007 Contra Costa County Capital Road Improvement & Preservation Program, although funding has not been identified.~~ If this improvement is not included in a County fee program or other funding program at the time of project approvals, the project applicant shall be responsible for their fair share of the improvement The project applicant shall pay the required fee prior to the issuance of building permits.

**Mitigation Measure CUM TRA-2 (Option 1):** Mitigation of the unacceptable traffic conditions at the Holway Drive/Byron Highway and Camino Diablo Road/Byron Highway intersections can be achieved by installing a traffic signal at the Camino Diablo Road/Byron Highway and providing left-turn pockets on all approaches. Traffic turning left from eastbound Camino Diablo Road to northbound Holway Drive and left again from Holway Drive to Byron Highway would instead turn left at the signalized Camino Diablo Road/Byron Highway intersection. This mitigation would require modifications to the adjacent railroad crossing west of the intersection to provide the required left turn pocket on the eastbound approach.

This improvement is included in the 2013 ECRAOB Draft East County Regional AOB Transportation Mitigation Fee Update project list. The project applicant shall pay the required AOB fee.

**Mitigation Measure CUM TRA-2 (Option 2):** ~~As an alternative to Mitigation Measure CUM TRA-2 (Option 1), mitigation of the unacceptable traffic conditions at the Holway Drive/Byron Highway and Camino Diablo Road/Byron Highway intersections can be achieved by installing traffic signals at both intersections, in addition to adding a northbound left turn lane pocket at the Holway Drive/Byron Highway intersection. Traffic would not be shifted under this mitigation, and a left turn pocket across the railroad crossing at the Camino Diablo Road/Byron Highway intersection would not be needed.~~

~~A signal at the Holway Drive/Byron Highway intersection is not identified in any funding program. Similarly, the installation of a signal at Camino Diablo Road/Byron Highway is not identified in any funding program.~~

~~If these improvements are not included in a County fee program at the time of project approvals, the project applicant shall pay its fair share towards the cost of these improvements to the County's Road Trust account (Fund #8192) prior to the issuance of building permits. This trust fund shall fund improvements to intersections identified as operating unacceptably under cumulative conditions and not identified in a fee program. As indicated in Table 4.16-15, the project applicant would be required to contribute between 2 percent and 14 percent of the total costs for this improvement.~~

**Mitigation Measure CUM TRA-3:** Mitigation of the unacceptable traffic conditions at the Sellers Avenue/Balfour Road intersection can be achieved by installing a traffic signal and providing left turn lanes at all four intersection approaches.

This improvement is included in the 2013 ECRAOB Draft East County AOB Transportation Mitigation Fee Update project list. The project applicant shall pay the required AOB fee. Implementation of this mitigation measure would reduce this impact to less-than-significant.

**Mitigation Measure CUM TRA-4:** Mitigation of the unacceptable traffic conditions at the Point of Timber Road/Byron Highway intersection can be achieved by installing a traffic signal. This



improvement is included in the ~~2013 ECRAOB Draft East County AOB~~ Transportation Mitigation Fee Update project list. The project applicant shall pay the required ~~AOB~~ fee.

**Mitigation Measure CUM TRA-6:** Mitigation of the unacceptable traffic conditions at the Marsh Creek Road/Sellers Avenue intersection can be achieved by installing a traffic signal. This improvement is included in the ~~2013 ECRAOB Draft East County AOB~~ Transportation Mitigation Fee Update project list. The project applicant shall pay the required AOB fee.

**Mitigation Measure CUM TRA-10:** Mitigation of the unacceptable traffic conditions at the Camino Diablo Road/Vasco Road intersection can be achieved by adding a northbound right turn lane. This improvement is included as one of several improvements at this intersection in the 2013 ECRAOB ~~Draft East County AOB~~ Transportation Mitigation Fee Update project list. The project applicant shall pay the required ~~AOB~~ fee.

**Conclusion:** The project changes would not substantially increase the severity of the previously identified impacts related to transportation and traffic in the 2013 EIR. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.

**XV UTILITIES AND SERVICE SYSTEMS**

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	Yes	No	No	No	Yes
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Yes	No	No	No	Yes
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Yes	No	No	No	No mitigation required
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	Yes	No	No	No	Yes
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Yes	No	No	No	Yes
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	Yes	No	No	No	No mitigation required
g) Comply with federal, state, and local statutes and regulations related to solid waste?	Yes	No	No	No	No mitigation required

**Discussion:** The 2013 EIR determined that stormwater drainage will be handled on-site with treatment in bio-swales before release into waterways and will comply with the county's C.3 requirements. Additionally, Potrero Hills Landfill has remaining capacity to serve the 292 residential units. The project applicant will submit, as a condition of approval, a Debris Recovery Plan prior to issuance of the building or demolition permit; therefore, would comply with all applicable regulations related to solid waste. These impacts would be less than significant.

The 2013 EIR determined significant effects associated with meeting sufficient water supply demands. However, implementation of facility improvements and adherence to **Mitigation Measure UTIL-1** will address the potential for the project to outpace available water distribution and reduce the impact to a less-than-significant level. As part of this measure and as a condition of approval, the County will require the project to incorporate indoor and outdoor water conservation measures to reduce consumption. The 2013 EIR also determined significant impacts with regard to wastewater treatment capacity. However, improvements required to accommodate the increase in wastewater capacity due to projected growth are included in the Wastewater Master Plan. As a result, the Town of Discovery Bay will have sufficient capacity to serve the project and will not exceed the Regional Water Quality Control Board's requirements for wastewater treatment. Furthermore, adherence to **Mitigation Measure UTIL-2** will reduce the impacts to a less-than-significant level.

The proposed modifications are mostly associated with the layout of the proposed site plan and the construction technique used to build the shoring walls for the development. As discussed in **Section XII, Population and Housing**, of this addendum, the project modifications would not result in a change in residential units from the previously proposed project. Therefore, Potrero Hills Landfill could still accommodate solid waste generated by residents. Additionally, since this addendum assumes no substantial increase in population, proposed modifications would not substantially increase water supply and wastewater generation. As a result, **Mitigation Measures UTIL-1** and **UTIL-2** would continue to mitigate the impacts to a less-than-significant level. The existing condition of approval for the Debris Recovery Plan would remain in place as well. Additionally, the proposed modifications would not alter the proposed on-site with treatment in bio-swales. Project modifications would not alter the conclusions of the 2013 EIR and no new impacts would occur.

**Conclusion:** The project changes would not have an effect on utilities and services within the project site. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.

**XVI VISUAL RESOURCES**

Issues and Supporting Information Sources	Discussed in EIR?	Do The Proposed Changes Involve New Impacts Not Previously Identified?	New Circumstances Involving New Impacts?	New Information Requiring New Analysis or Verification?	Final EIR Mitigation Measures Implemented or Address Impacts?
Would the Project:					
a) Have a substantial adverse effect on a scenic vista?	Yes	No	No	No	No mitigation required
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Yes	No	No	No	No mitigation required
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	Yes	No	No	No	No mitigation required
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Yes	No	No	No	Yes

**Discussion:** The 2013 EIR determined that the project would have no impacts to views from a scenic highway as there are not any state-designated scenic highways within proximity of the project site. While the proposed residential development may alter long-range views of the Diablo Range, Kellogg Creek, and associated waterways of the Delta estuary systems, such views are already partially obstructed by adjacent development or are not visible in several locations around the project site due to the topography of the land. Furthermore, the proposed residential development would be visually compatible with the type and intensity of surrounding development and provide expanded views of Delta water from the public trails, and South Bay water from the project entry roads and adjoining open space/recreational area. As such, the project would not substantially alter the existing urban-residential character of the area. Generally, project construction activities were not considered to result in a significant impact because of its temporary nature. While the project would create new sources of light and glare from new residential development and vehicular traffic, the project applicant will prepare a lighting plan to mitigate these impacts to a less-than-significant level.

The proposed modifications are mostly associated with the layout of the proposed site plan and the construction technique used to build the shoring walls for the development. The total number of dwelling units constructed would remain the same and the residential development would still remain visually compatible with the type and intensity of surrounding developments, as previously assessed. While the construction technique will change, such construction activities would have similar visual effects and would occur within the same area of disturbance previously analyzed in

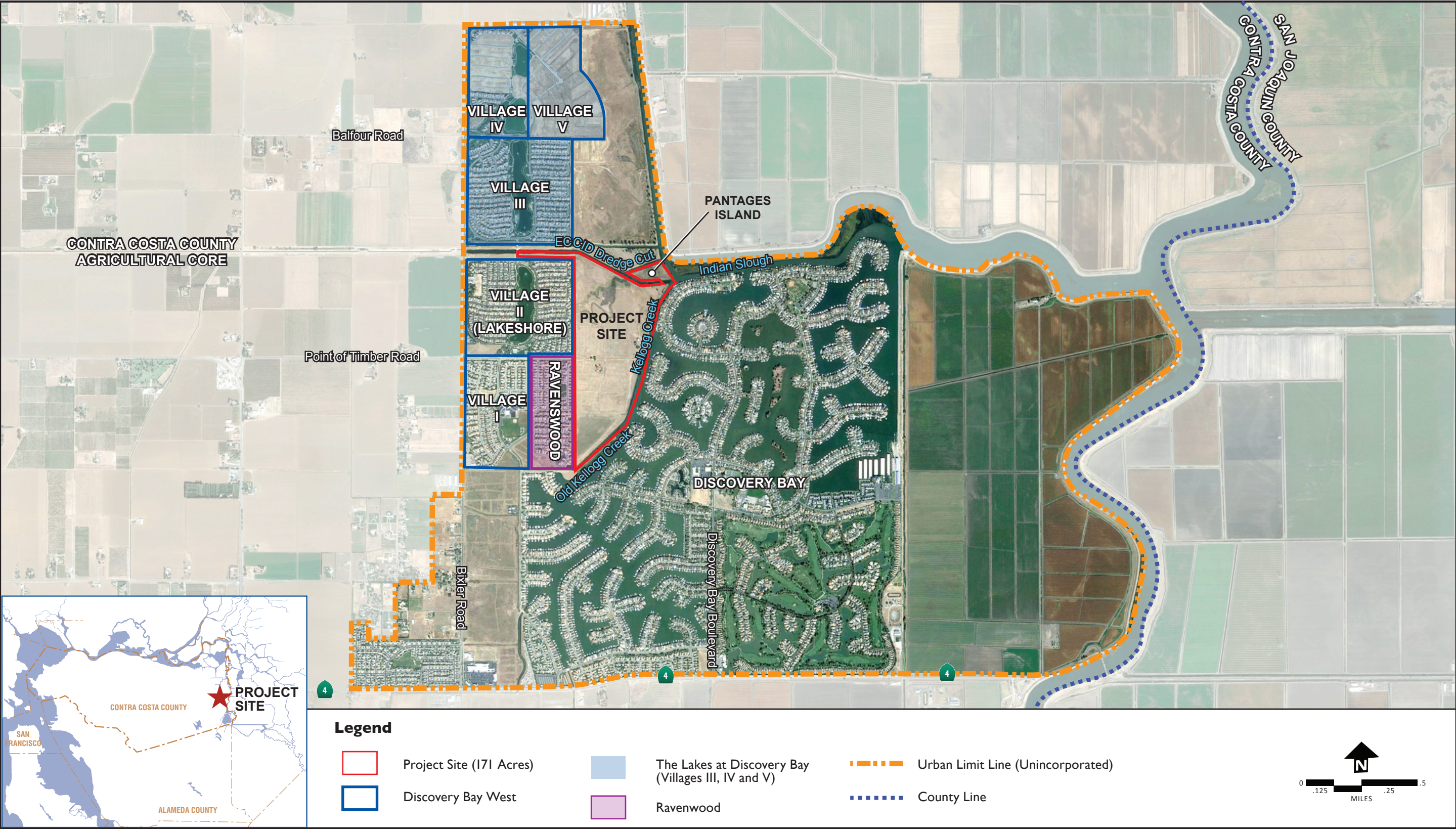
the 2013 EIR. The configuration of the proposed development would slightly change as well; but the overall visual quality and character of the development would remain the same relative to its surroundings. The lighting plan proposed in **Mitigation Measure VIS-1** would continue to reduce new sources of residential light and glare to a less-than-significant level.

**Conclusion:** The project changes would not substantially damage existing scenic resources, degrade the existing visual character or quality of the area, or create a new permanent source of light or glare. Accordingly, Contra Costa County finds the following.

- A) Substantial changes in the project and project circumstances resulting in new significant effects or a substantial increase in the severity of previously identified significant effects would not occur.
- B) New information of substantial importance with respect to this environmental resource resulting in new significant effects or a substantial increase in the severity of previously identified effects has not been identified.
- C) None of the proposed project changes would significantly affect this environmental resource.

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GENERAL PLAN COMPARISON

GENERAL PLAN ABBREVIATION	GENERAL PLAN DESIGNATION	ACREAGE
SM	SINGLE FAMILY MEDIUM	46.3
SH	SINGLE FAMILY HIGH	34.0
WA	WATER	46.8
PS	PUBLIC/SEMI-PUBLIC	0.9
OS	OPEN SPACE	43.2
NUMBER OF WATERFRONT HOMES		116
NUMBER OF NON-WATERFRONT HOMES		176
TOTAL NUMBER OF HOMES		292



PREVIOUSLY APPROVED FINAL DEVELOPMENT PLAN (PLANS OCTOBER 2009)  
APPROVED BY BOARD OF SUPERVISORS 12/3/13

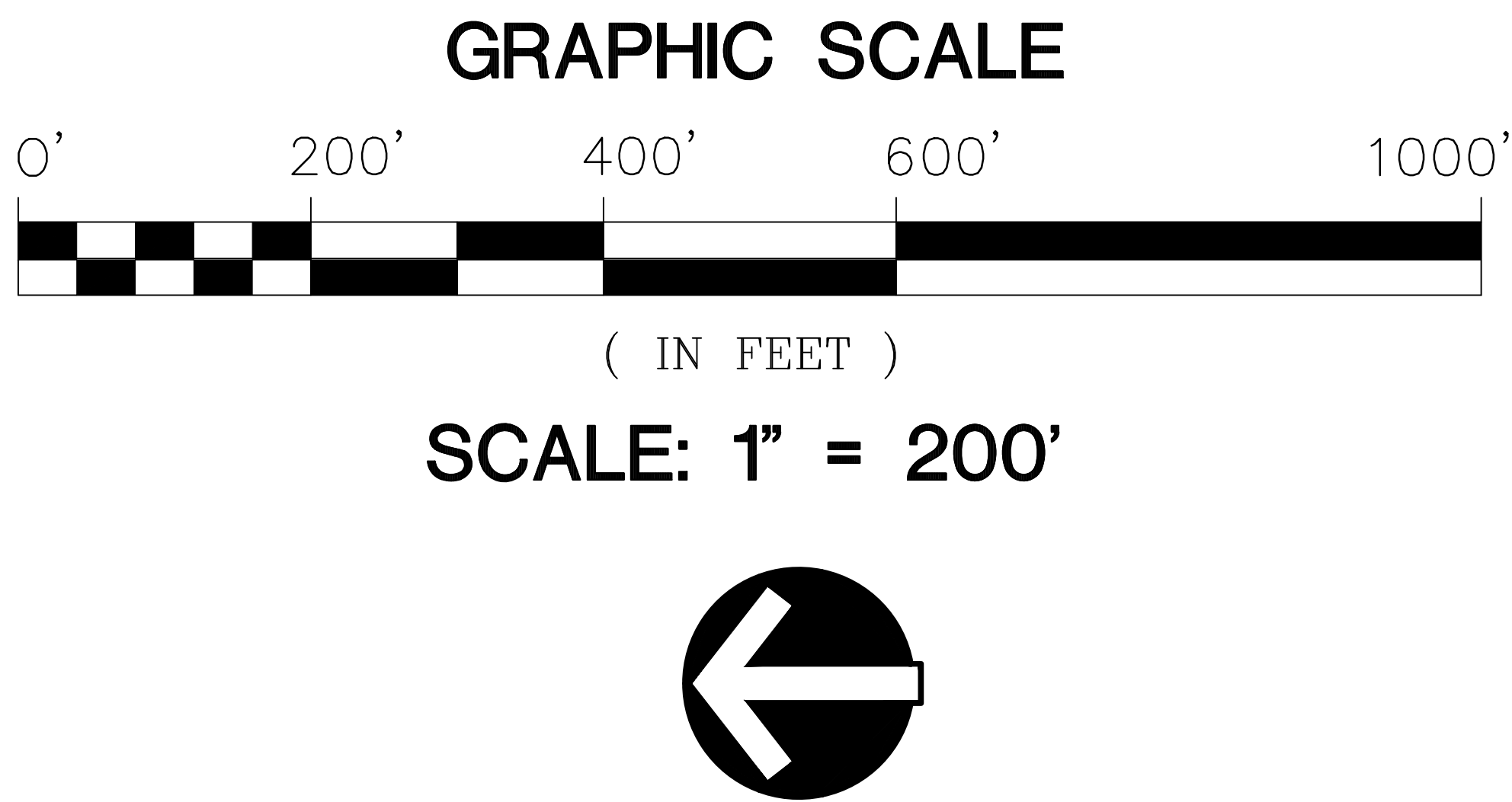
GENERAL PLAN ABBREVIATION	GENERAL PLAN DESIGNATION	ACREAGE	NET CHANGE
SM	SINGLE FAMILY MEDIUM	42.3	-4.0
SH	SINGLE FAMILY HIGH	45.5	+11.5
WA	WATER	37.6*	-9.2*
PS	PUBLIC/SEMI-PUBLIC	2.6	+1.7
OS	OPEN SPACE	43.2	0
NUMBER OF WATERFRONT HOMES		105	-11
NUMBER OF NON-WATERFRONT HOMES		187	+11
TOTAL NUMBER OF HOMES		292	

\*9.7 ACRES CONSIST OF RIPRAP SLOPE AREA, WHICH IS LOCATED AT THE BACK OF THE WATERFRONT LOTS (LIKE EXISTING DISCOVERY BAY LOTS). THIS RIPRAP SLOPE AREA IS PART OF THE LOTS. IF RIPRAP SLOPE AREA IS INCLUDED AS WATER, THEN THE PROJECT WILL HAVE 47.3 ACRES FOR WATER ACREAGE.



PROPOSED MODIFICATION TO FINAL DEVELOPMENT PLAN (MARCH 2014)

**SUBDIVISION 9010**  
**COMPARISON PLAN**  
MODIFICATION TO THE  
FINAL DEVELOPMENT PLAN  
**PANTAGES BAYS**  
A RESIDENTIAL COMMUNITY WITH  
INDIVIDUAL DOCKS AND DEEP WATER ACCESS  
**CONTRA COSTA COUNTY, CALIFORNIA**  
BY  
**PANTAGES AT DISCOVERY BAY, LLC**  
OCTOBER, 2009  
MODIFIED MARCH, 2014



Property of dk CONSULTING  
DO NOT REPRODUCE  
Additional Information including Property Lines, Ownership, Acreage, Topography, etc. Covering this area is available from dk CONSULTING

SHEET INDEX	
NO.	DESCRIPTION
1	COMPARISON PLAN (MODIFIED FDP COMPARED TO OCT. 2009 FDP [DP 04-3062])
2	REGIONAL CONTEXT AERIAL
3	LOCAL AERIAL (INCLUDING EXISTING AND PROPOSED GENERAL PLAN & ZONING DESIGNATIONS)
4	COMPARISON PLAN (MODIFIED VTM COMPARED TO OCT. 2009 VTM [SD 06-9010])
5	MODIFICATION TO THE PRELIMINARY AND FINAL DEVELOPMENT PLAN
6	BOUNDARY & TOPOGRAPHY FOR TENTATIVE MAP (INCLUDING SOILS, FEMA & EXISTING TREE INFORMATION)
7	VESTING TENTATIVE MAP & PRELIMINARY GRADING PLAN
8	MOORING AREA PLAN
9	BANK HABITAT PLAN
10	DELINEATION MAP
11	TRAILS, 8' SIDEWALKS & VIEW FENCING
12	STREET, OPEN SPACE, WATER, MARINE PATROL SUBSTATION & LANDSCAPE PARCELS
13	LANDSCAPE SITE PLAN

Figure 2



COMPARISON PLAN  
(MODIFIED FDP COMPARED TO  
OCT. 2009 FDP [DP 04-3062])  
SHEET 1 OF 13



SUBDIVISION 9010  
LOCAL AERIAL\*

\* WITH EXISTING & PROPOSED  
GENERAL PLAN AND ZONING DESIGNATIONS  
MODIFICATION TO THE FINAL DEVELOPMENT PLAN AND  
VESTING TENTATIVE MAP SUBMITTAL

PANTAGES BAYS  
A RESIDENTIAL COMMUNITY WITH  
INDIVIDUAL DEEP WATER ACCESS  
SE 1/4 SECTION 23, T. 1 N., R. 3 E., &  
NE 1/4 SECTION 26, T. 1 N., R. 3 E., M.D.B. & M.  
CONTRA COSTA COUNTY, CALIFORNIA

BY  
PANTAGES AT DISCOVERY BAY, LLC  
OCTOBER, 2009  
MODIFIED MARCH, 2014



LEGEND

DESCRIPTION	PROPOSED	EXISTING
GENERAL PLAN	WA P-1	AL A-2
ZONING		
SUBDIVISION BOUNDARY	---	---
PARCEL/LOT LINE	---	---
RIGHT OF WAY LINE	---	---

GENERAL PLAN ABBREVIATION	GENERAL PLAN DESIGNATION	ACREAGE	DENSITY RANGE	ACTUAL DENSITY*
SM	SINGLE MEDIUM	42.3	3.0-4.9	3.3
SH	SINGLE HIGH	45.5	5.0-7.2	5.5
WA	WATER	37.6		
PS	PUBLIC/SEMI-PUBLIC	2.6		
OS	OPEN SPACE	43.2		

\* SEE SHEET 1

NOTE:

1. EAST CONTRA COSTA IRRIGATION DISTRICT (ECCID) SHALL RETAIN FEE SIMPLE OWNERSHIP OF THIS PARCEL AND CONVEY AN EASEMENT TO PANTAGES AT DISCOVERY BAY, LLC OR ASSIGNEE FOR COMPLETION OF CREEK BANK CHANGES AND THEIR MAINTENANCE.

PHOTO BY: American Aerial, Inc.  
PHOTO DATE: FEBRUARY, 2014  
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Figure 3

\* INCLUDING EXISTING & PROPOSED  
GENERAL PLAN AND ZONING DESIGNATIONS



# SUBDIVISION 9010 VESTING TENTATIVE MAP & PRELIMINARY GRADING PLAN

MODIFICATION TO THE FINAL DEVELOPMENT PLAN AND  
VESTING TENTATIVE MAP SUBMITTAL

## PANTAGES BAYS

A RESIDENTIAL COMMUNITY WITH  
INDIVIDUAL DOCKS AND DEEP WATER ACCESS

### CONTRA COSTA COUNTY, CALIFORNIA

BY  
**PANTAGES AT DISCOVERY BAY, LLC**

OCTOBER, 2009  
MODIFIED SEPTEMBER, 2014



**Proposed Sheet Pile Wall**

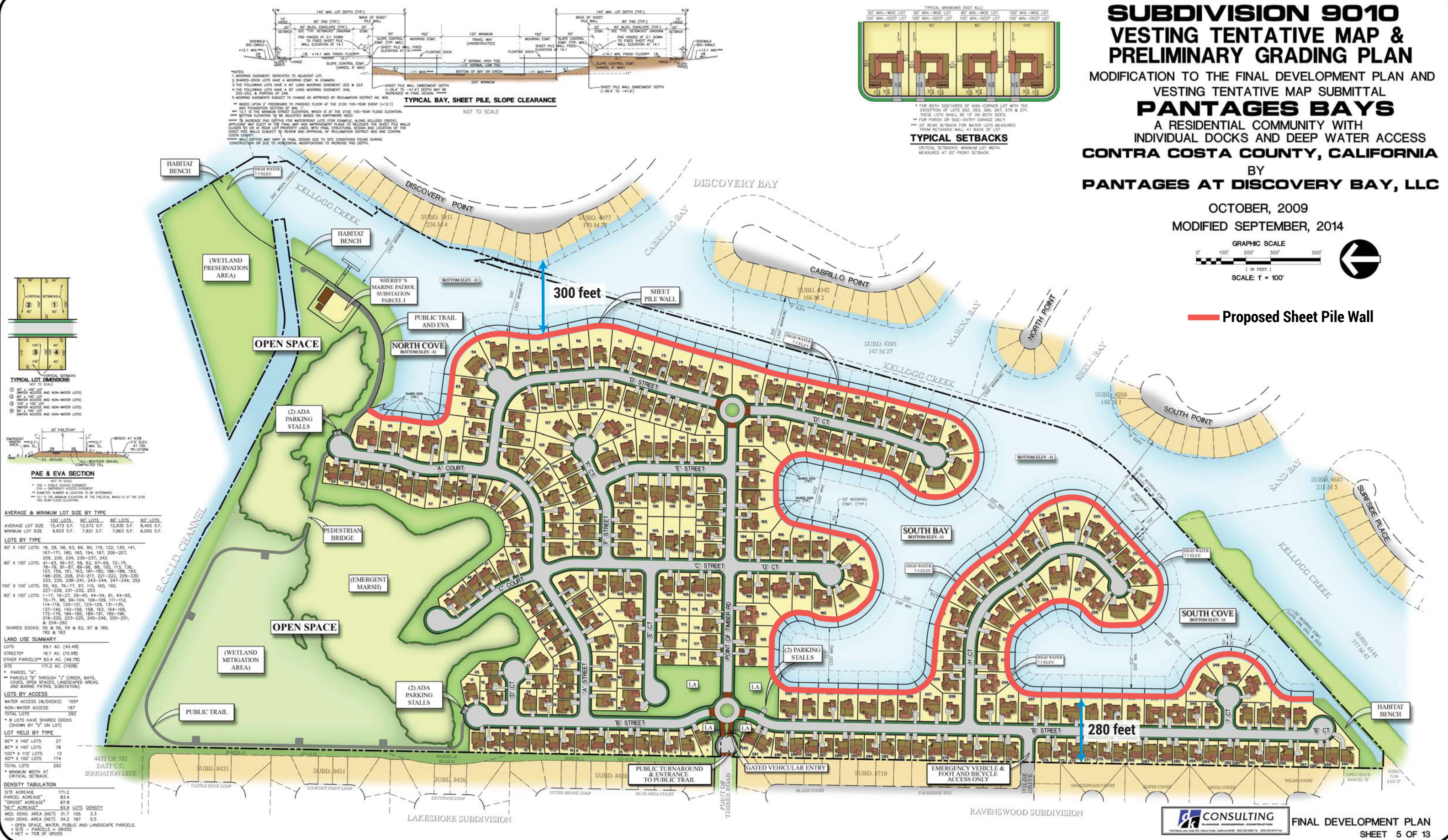


Figure 4: Proposed Site Plan and Sheet Pile Wall